



Managing fire safety in the workplace

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Introduction

Every year, there are around 650 fires in workplaces in Northern Ireland, putting people at risk and damaging property. Many of these could be avoided if fire safety was properly managed.

This booklet explains how you, the employer, can reduce the risk of fire in your workplace and what you have to do to keep to the laws relating to fire issues.

You may also find this booklet useful if you are:

- **self-employed;**
- **an employee;**
- **a representative for employees;**
- **in control of workplaces which people you do not employ or members of the public have access to; or**
- **any other person who has a role in managing fire safety in the workplace.**



Responsibilities

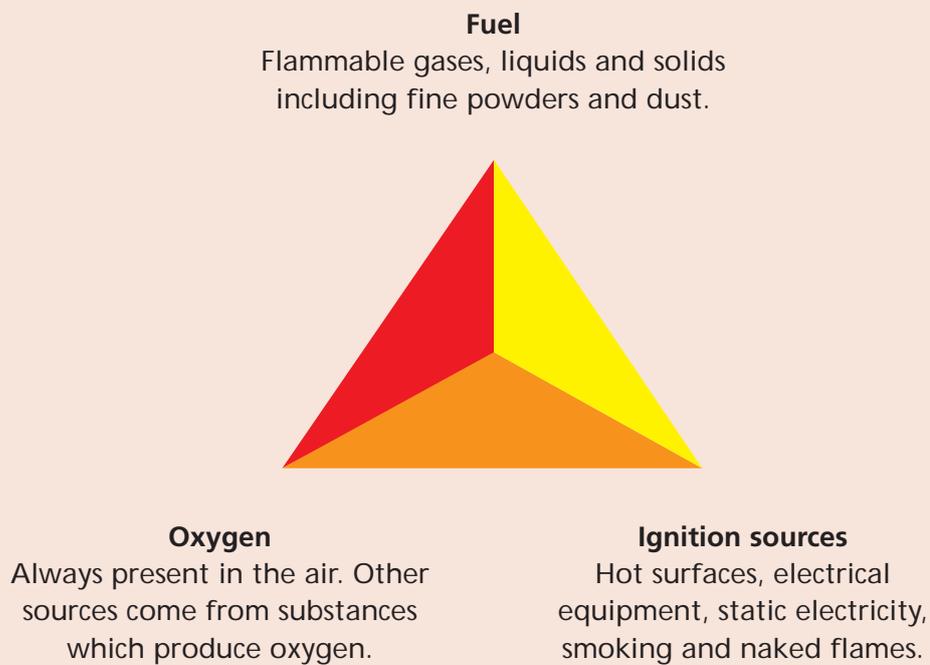
If you are an employer or you own premises, you have a legal duty (see the note below) to make sure that your workplace or premises and the people who work there are kept safe from fire and its effects. You can do this by:

- **carrying out a fire risk assessment for your workplace;**
- **using the risk assessment to find out who might be especially at risk if there was a fire (you must keep a record of this information if you employ five or more people);**
- **providing and maintaining the necessary fire precautions to protect the people who use your workplace; and**
- **providing information, instructions and training to your employees about the fire precautions in your workplace.**

Note: For more information on fire laws, please see page 51 at the back of this book.

How do fires start?

For a fire to start, the three things in the triangle below are needed.



If any one of these is missing, a fire cannot start. So, taking steps to avoid the three coming together will reduce the chances of a fire happening.

Where do I start?

You need to carry out a fire risk assessment for your workplace.

What is a risk assessment?

Carrying out a risk assessment simply means looking at what, in your work activities and workplace, could cause harm to people. This will allow you to decide whether you have taken enough precautions or need to do more to avoid harm.

What do the terms 'hazard' and 'risk' mean?

A **hazard** is something that could cause harm (for example, a hot surface).

The **risk** is the chance of that hazard causing harm, together with an idea of how serious the harm could be.

Why do I need to carry out a fire risk assessment?

A fire risk assessment will help you to decide:

- **what the chances are of a fire starting in your workplace;**
- **whether a fire in your workplace would put people in danger;**
- **whether your existing fire precautions are suitable; or**
- **whether more precautions are needed.**

How do I carry out a fire risk assessment?

There are five simple steps involved in carrying out a fire risk assessment.

Step 1: Identify possible fire hazards in your workplace.

Step 2: Decide who might be harmed and how .

Step 3: Assess the risks and decide what precautions to take.

Step 4: Record what you find, tell your employees and make the necessary improvements.

Step 5: Review your fire risk assessment and update it if necessary.

For a risk assessment template, please see appendix 9 at the back of this book.

Fire risk assessment

When carrying out your risk assessment:

- **use your and your employees' knowledge and experience to identify fire hazards in the workplace;**
- **remember to consider work processes that could cause a fire, such as welding or grinding;**
- **take the whole of the workplace into account, including outdoor locations and rooms you rarely use;**
- **for small premises, you can assess the workplace as a whole;**
- **for larger premises, it will help to divide the workplace into zones such as offices, stores and stairways; and**
- **if you share your premises with other businesses, discuss your risk assessment with them.**

Step 1

Identify possible fire hazards
in your workplace

Step 1: Identify possible fire hazards in your workplace

A fire cannot start without a source of ignition (for example, matches) and something to fuel it (for example, wood shavings), so look for these in your workplace. Some examples are given in the tables below.

Sources of ignition	Sources of fuel
Lit cigarettes or matches	Wood, paper or card
Naked flames	Flammable liquids and solvents, such as paints, varnish, thinners
Hot processes (such as welding)	Flammable gases, such as liquefied petroleum gas (LPG)
Faulty or misused electrical equipment	Waste materials, in particular finely divided materials such as wood shavings, dust and paper

You should also consider how your premises are built and how this might allow a fire to spread. If you have particular concerns, you should ask for advice from the Northern Ireland Fire and Rescue Service, Building Control or other experts (see page 52 for contact details).



Step 2

Decide who might be harmed and how

Step 2: Decide who might be harmed and how

You should be clear about which groups may be at risk.

Remember to consider:

- **all of your employees;**
- **vulnerable groups such as people with disabilities, young workers or people with communication difficulties;**
- **people who are not in the workplace all of the time, such as cleaners or visitors;**
- **members of the public; and**
- **people in other businesses who share your workplace.**

Step 3

Assess the risks and decide
what precautions to take

Step 3: Assess the risks and decide what precautions to take

Start by looking at your existing fire precautions, then decide whether more precautions are needed. You should consider the following points.

A - Controlling sources of ignition

Some suggestions

- **Remove unnecessary sources of heat from the workplace.**
- **Make sure that your machinery and equipment has been designed to limit the risk of fire and explosions.**
- **Make sure that all your electrical equipment is regularly serviced and fit for the purpose it is being used for.**
- **Smoking should only be allowed in safe areas away from any sources of fuel. (See the note below.)**
- **Make sure that any processes involving 'hot work' (such as welding) are properly managed and controlled.**
- **Keep in a safe condition any equipment that could provide a source of ignition.**

Note: Smoking is not allowed in enclosed workplaces in Northern Ireland.

B - Limiting the fuel for a fire

Some suggestions

- **Remove or reduce flammable materials and substances and replace them with less flammable ones if possible.**
- **Make sure that flammable materials are handled, stored and used correctly.**
- **Store flammable substances in their proper storage containers in fire-resistant cabinets.**
- **Store larger amounts of flammable substances in a fire resistant store.**
- **Do not allow waste materials and rubbish to build up.**
- **Do not allow grease, dust or oil to build up around equipment.**
- **Make sure you keep flammable materials away from any sources of ignition (for example matches).**

C - Detecting and warning about fires

You must have an effective way of:

- detecting any fires; and
- warning people in your workplace quickly enough to allow them to escape to a safe place before the fire spreads and makes it more difficult for them to leave the building.

Detecting a fire

- Consider arrangements for detecting a fire. You should decide whether you need to install automatic fire detectors or smoke alarms. These may not be necessary in smaller workplaces. (For more advice, speak to the Northern Ireland Fire and Rescue Service - see page 52 for contact details).

Warning about a fire

- In smaller workplaces where all exits are clearly marked and employees only need to travel a short distance to escape, you may only need to give a shouted warning.
- If employees are spread out over a wider area and you cannot guarantee that they will hear a shouted warning, you could use a manually operated sounder (for example, a rotary gong or a hand bell).
- Larger premises may need an electrical alarm system with manual call points.
- If there is a lot of background noise in your workplace or you have an employee with a hearing problem, you may also need to install a visual alarm, such as a distinctive flashing or rotating light.

D - Escaping a fire

Once people are aware of a fire, they should be able to leave the building safely. When considering how your employees can escape if there is a fire, you should think about:

- **the size of the workplace, how it is built, its layout, its contents and the number and width of available escape routes;**
- **where people may be in the workplace and what they might be doing when a fire starts;**
- **the number of people who may be in the workplace and how familiar they are with the building; and**
- **whether employees are able to escape without needing help.**

You should also have an agreed safe assembly point which all employees are aware of.

General principles for escape routes

- **Escape routes should always lead to a safe place. They should also be wide enough for the number of people inside the building.**
- **Escape routes, exits and doorways should always be available for use and kept clear of obstacles at all times.**
- **There should be more than one escape route in larger or higher-risk premises.**

Escape route doors

You should make sure that people escaping can open any door on an escape route easily and immediately, without having to use a key. All outward opening doors on escape routes should be fitted with a device such as a panic latch or push pad.

Fire doors

Fire doors should close themselves and be labelled 'Fire Door - Keep Shut'.



Emergency escape and fire exit signs

Emergency escape routes and exit doors should be clearly identified by suitable signs.

Lighting

All escape routes, including outside ones, must have enough lighting to allow people to find their way out safely. Emergency escape lighting may be needed in poorly lit areas or if the workplace is used at night.

Emergency lighting

Emergency lighting needs to work if the normal lighting fails completely. It should:

- **show the escape routes clearly;**
- **provide lighting along escape routes to allow people to move safely towards the final exits; and**
- **make sure that fire call points and firefighting equipment can be found easily.**

Emergency plan

You should prepare an emergency plan which provides clear instructions on:

- the action employees should take if they discover a fire;
- how people will be warned if there is a fire;
- how the workplace should be evacuated;
- where people should go after they have left the workplace and procedures for checking whether the workplace has been evacuated;
- where the main escape routes are and how people can use them to escape to safe places;
- the firefighting equipment provided;
- which employees have specific responsibilities if there is a fire (for example, the fire warden) and what their duties are (for example, making sure that all areas of the building have been safely evacuated and taking a head count);
- how to safely evacuate the people identified as being especially at risk, such as disabled people, members of the public and visitors;
- if appropriate, which machines, processes and power supplies need to be stopped or isolated if there is a fire;
- specific arrangements, if necessary, for areas of the workplace which are a higher risk;
- how the Northern Ireland Fire and Rescue Service (NIFRS) and any other necessary emergency services will be called and who will be responsible for doing this;
- procedures for communicating with the NIFRS when they arrive and telling them about any special risks (for example, where any highly flammable materials might be kept or the location of any asbestos); and
- what training employees need and arrangements for making sure they receive this training.

E - Fighting fires

All workplaces should have equipment for putting out fires.

Fire extinguishers

- Portable fire extinguishers allow suitably trained people to tackle a fire in its early stages (if they can do so without putting themselves in danger).
- When deciding on the types of extinguishers to provide, consider the materials you use and store in your workplace (see the picture below).
- Fire extinguishers should be kept in obvious positions on escape routes and close to high-risk activities such as welding.
- If possible, fire extinguishers should be securely hung on wall brackets and not placed directly on the floor.



Fire blankets

- Fire blankets should be kept near the fire hazard they will be used on.
- Store blankets in a position which is easy and safe to get to if there is a fire.
- Light-duty blankets are suitable for dealing with small fires in containers of cooking oil or fat and fires involving clothing.
- Heavy-duty fire blankets are for industrial use where there is a need for the blanket to protect against molten materials.

Sprinkler systems

If your workplace is small, portable fire extinguishers will probably be enough for tackling small fires. However, in larger buildings, or if you need to protect the escape routes or the property or contents of the building, you may need to consider a sprinkler system.

F - Maintaining and testing fire precautions

You must keep fire safety measures and equipment in the workplace in effective working order. This includes the following:

- **Fire detection and alarm systems**
- **Firefighting equipment**
- **Fire doors**
- **Stairways**
- **Corridors**
- **Emergency lighting**
- **Fire notices**

You will need to:

- **appoint a competent person (someone with the necessary knowledge, experience and ability) to carry out regular checks, servicing and maintenance, whatever the size of the workplace;**
- **put any faults right as quickly as possible;**
- **keep a record of the work carried out;**
- **carry out regular fire drills; and**
- **appoint a competent person to act as fire warden, both during fire drills and if there is a fire.**

Please see appendices 1 to 8 at the back of this booklet for the type of checks that should be carried out on your fire safety systems, equipment and procedures and how often they are needed.

G - Housekeeping

Good housekeeping will reduce the possibility of a fire starting. Some suggestions are as follows.

- **Do not allow rubbish, waste paper or other material which could catch fire to build up.**
- **Do not store large amounts of flammable materials unless this is absolutely necessary.**
- **Store flammable materials in an appropriate place (see page 18).**
- **Turn off electrical equipment when it is not being used (unless it is designed to be permanently connected).**
- **Make sure that you do not leave material which could easily catch fire close to a source of heat.**
- **Make sure that machinery and any office equipment is well ventilated and regularly cleaned.**

H - Fire safety information for employees

Information

You should give your employees information about fire precautions in the workplace and what to do if there is a fire.

You also need to consider employees who:

- **work outside normal working hours;**
- **work alone;**
- **have disabilities; or**
- **have communication difficulties.**

Make sure that you provide training and written information in a way your employees can understand.

You should give all employees information about:

- **which escape route to use from where they are working; and**
- **the fire warning system used in the area they are working in.**

Step 4

Record what you find, tell your employees and make the necessary improvements

Step 4: Record what you find, tell your employees and make the necessary improvements

Write down the results of your fire risk assessment and share them with your staff. If you have fewer than five employees, your results do not have to be in writing, although it is useful to do this so that you can review it at a later date or if something changes.

When making the necessary improvements, draw up an action plan and tackle the high-risk hazards with the most serious consequences first.

Your fire risk assessment should show that you:

- **carried out a proper check;**
- **considered all those people who might be affected;**
- **dealt with all the significant hazards;**
- **have reasonable precautions in place, and have limited whatever risk is still present; and**
- **involved your staff in the process.**

Step 5

Review your fire risk assessment and update it if necessary

Step 5: Review your fire risk assessment and update it if necessary

Few workplaces stay the same. Sooner or later, you will bring in new equipment, substances and procedures that could lead to new fire hazards. You may also make alterations to the building. Because of this, it makes sense to continually review your fire risk assessment to consider whether:

- **there have been any changes;**
- **there are improvements you still need to make;**
- **your employees have spotted any problems; and**
- **you have learnt anything from 'near misses'.**

Make sure your fire risk assessment stays up to date.

Appendices

Over the next few pages, you will find suggested templates for the recommended checks to be carried out on your fire safety systems, equipment and procedures. These are summarised in the table below.

Appendix number	Title	How often
1	Fire alarm - inspection and check	Weekly Yearly (by a qualified service engineer)
2	Smoke alarms - inspection and check	Weekly Yearly (by a qualified service engineer)
3	Firefighting equipment location checklist	Weekly
4	Firefighting equipment - inspection and check	Weekly Yearly (by a qualified service engineer)
5	Fire doors - inspection	Weekly
6	Stairways and corridors - inspection	Weekly
7	Emergency lighting - inspection and check	Weekly
8	Fire drill	Twice yearly

Appendix 9 is a fire risk assessment template.

More information

Relevant fire laws

On 15 November 2010 the legislation regarding fire safety regulations in non-domestic premises changed.

The Fire Services (Northern Ireland) Order 1984 was repealed on 15 November 2010 and the previous fire certification process ceased. Existing premises that have previously been subject to that Order will most likely be compliant in terms of their fire safety measures. However, it is now necessary for those premises to have a current fire risk assessment.

Part 3 of The Fire and Rescue Services (Northern Ireland) Order 2006 and The Fire Safety Regulations (Northern Ireland) 2010 came into effect on 15 November 2010. The legislation seeks to replace and simplify existing fire safety legislation in non-domestic premises using a modern risk based approach to fire prevention. This means that any person who has some level of control in premises must take reasonable steps to reduce the risk from fire and make sure people can safely escape if there is a fire. If you have five or more employees, or require a licence or registration, you must record the significant findings of the risk assessment and any actions you have taken to remove or reduce the risk.

Fire Precautions (Workplace) Regulations (Northern Ireland) 2001

If a fire risk assessment for the premises has been carried out under this legislation and this assessment has been regularly reviewed, then all that should be required is a revision of that assessment taking into account the wider scope of the new legislation.

For further information please see the Northern Ireland Fire and Rescue Service website: www.nifrs.org

Useful contacts

Health and Safety Executive for Northern Ireland (HSENI)

Address: 83 Ladas Drive
Belfast
BT6 9FR

Phone: 028 9024 3249
Textphone: 028 9054 6896
Helpline : 080 0032 0121
Fax: 028 9023 5383
E-mail: mail@hseni.gov.uk
Website: www.hseni.gov.uk

Northern Ireland Fire and Rescue Service (NIFRS)

Address: Headquarters
1 Seymour Street
Lisburn
County Antrim
BT27 4SX

Phone: 028 9266 4221
Fax: 028 9267 7402
E-mail: enquiries@nifrs.org
Website: www.nifrs.org



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